

The Recruit Assessment Program (RAP): History, DoD Perspective, and Experience with Marines in San Diego

CDR Sylvia Young, MC, USN
DoD Center for Deployment Health Research,
Naval Health Research Center, San Diego, CA

Accessions Research Consortium 29 JAN 2004



Collection of <u>baseline health data</u> is recognized as essential for:

- understanding health risks at entrance,
- understanding how service-related exposures affect health,
- developing early intervention and prevention programs to protect health and readiness.

Origin of the Recruit Assessment Program

Presidential Review Directive (PRD-5, 11Nov98)

"DoD and VA, in consultation with DHHS, shall establish a Recruit Assessment Program to develop and maintain comprehensive electronic health and risk factor information on all recruits and officer accessions at the time of initial military training..."



Endorsements

RAP project has been strongly supported by

- American Institute of Biological Sciences
- Armed Forces Epidemiological Board
- Department of Veterans Affairs
- Director Defense Research & Engineering
- Office of the Assistant Secretary of Defense for Health Affairs**
- Institute of Medicine
- TRICARE Management Activity

^{**}Lead on standardizing RAP and POM for DoD-wide use



RAP survey content includes:

- demographic data
- clinical and medical history
- family history
- psychosocial history
- occupational history
- substance abuse and risk factor screens



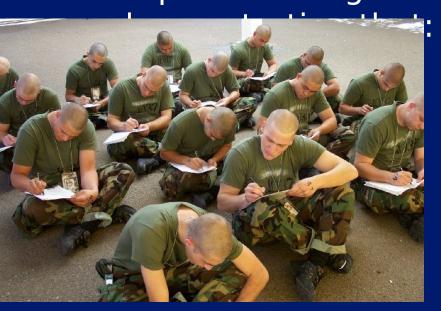
Sources of Questions:

- ACE Adverse Childhood Experiences
- AUDITAlcohol Use Disorders Identification Test
- CTQ Childhood Trauma Questionnaire
- HEAR Health Enrollment Assessment Review 2.0 (DoD)
- NCS National Comorbidity Study
- PRIME-MD Patient Health Questionnaire
- SF-12/36 Medical Outcomes Short Form
- **SF-93** Standard Form 93 (DoD, revised 6/96)
- YRBSS Youth Risk Behavior Survey



Recruit Assessment Program at MCRD San Diego

Acceptance of RAP at Marine Corps Recruit Depot San Diego was dependent upon



 RAP would not interfere with usual in-processing or training

More than 12 formal meetings were held with different MCRD stakeholders in early months of discussion.



Recruit Assessment Program at MCRD San Diego

Automating In-processing

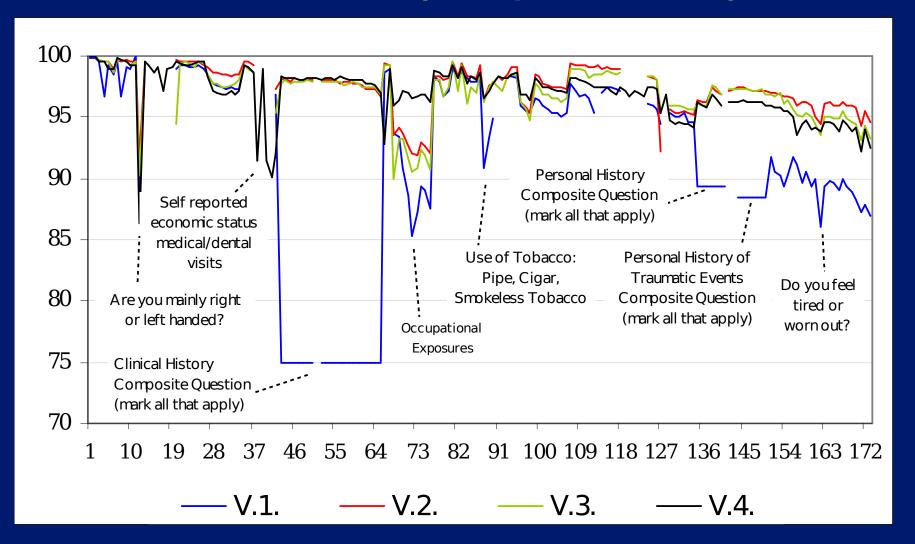
- RAP can facilitate registration of recruits in medical CHCS system, by linking verified demographic fields in database.
- Complex linking of software required separate contract. Process should be exportable to systems at other recruit commands.
- Data quality is improved at NMCSD.
- Nearly 100% of recruit CHCS records are synchronized with DEERS after the first training week.

Results of RAP focus groups, 2000-2003

Original survey: 17 pages, average of 60 minutes to complete.

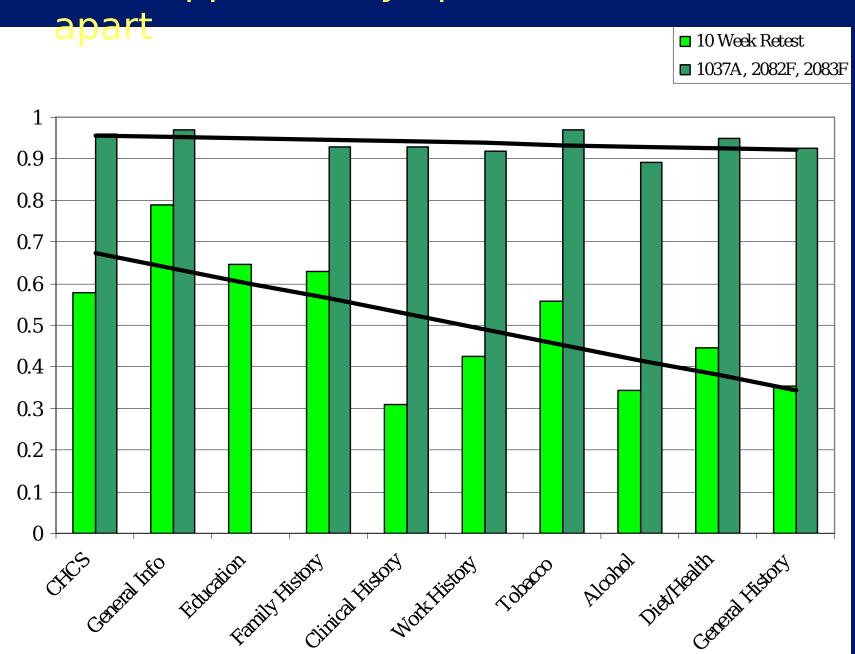
- Revised questions improved readability and comprehension, especially on family history issues.
- Versions used June 2001-March 2003: 12 pages, average of 30 (range 20-35) minutes to complete.
- Focus group testing identified need to add more smokeless tobacco questions.
- Navy SHIP data studies on attrition identified need to add questions expanding on education.
- Version used since March 2003: 13 pages, average of 30 minutes to complete.

RAP Survey Completion Rate by Version



Completion of questions from beginning to end of survey

RAP Kappas: 1 day apart vs 10 weeks





Summary of RAP at MCRD San Diego

- RAP integrated into recruit in-processing in June 2001.
- RAP survey administered to recruits with minimal disruption of training.
- Automated CHCS registration saves at least 40 hours/week for medical staff at in-processing.
- Automated registration facilitates early care, when needed.
- Data quality improved at NMCSD.
- Survey is evolving and completion rates are improving.
- Initial test-retest results (kappa statistics) look strong.



Summary of RAP at MCRD San Diego

- Successful implementation of RAP is feasible at basic training centers such as MCRD San Diego.
- Work is in progress to examine if there are differences in characteristics of recruits in Special Training Company (Medical Rehabilitation Platoon and Physical Conditioning Platoon) from recruits not in Special Training Company.
- Potential use to provide a comprehensive profile of the health characteristics of young adults in the United States.
- Potential use as baseline data for large cohort of Marines recently deployed to SWA.



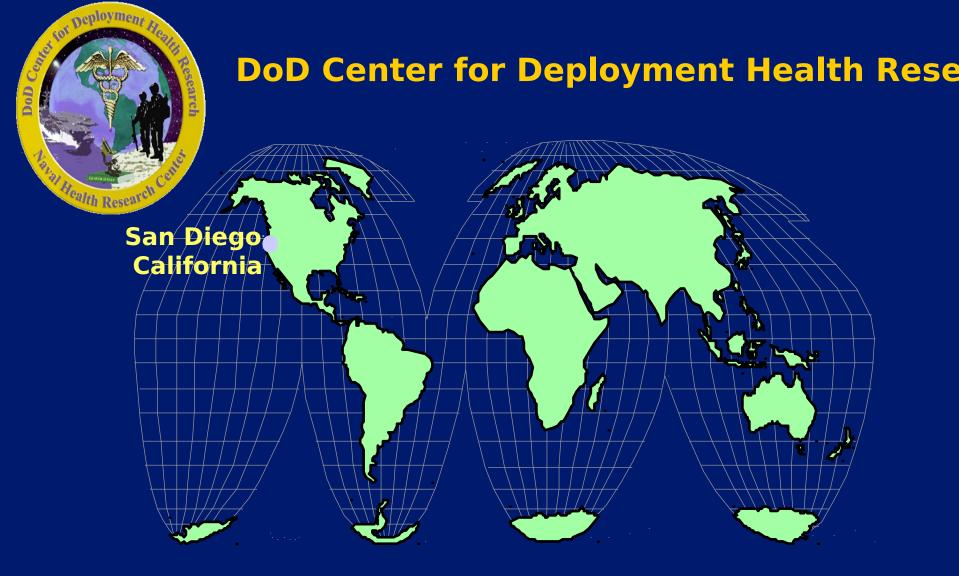
Future Direction

- Army is piloting RAP at Ft Jackson, led by USACHPPM (principal investigator, Keith Hauret). Implementation started Oct 1, 2002.
- Other military systems (Canada, Australia) have expressed strong interest in RAP as well.
- OASD (HA) is considering programmatic support DoD-wide via TMA. RAP data would be maintained in CHCS-II.



ACKNOWLEDGMENTS:

Col Riddle, Col Gibson, LtCol Dawkins, CDR Clark, Maj Green, Maj Mullins, CPT Hopkins (DoD-HA); COL Callihan, COL Thaler, COL Huddleston, LTC Walsh, SSGT Vollmer, SSGT Moreno (MCRD San Diego); CAPT Chapman, CDR Morris, LT Manley (NMCSD); Bob Bradley, Chris Farley, Ken Kaplan (Integic Corporation); Christina Corpuz, Christian Hansen, Annie Wang, Jim Whitmer, Christina Brocco, Suzanne Lane, Bill Honner, Suzanne Clark, Lesley Henry, Tyler Smith, Shawn Watson, Karen Schlangen, James Ramage, Beverly Hogan, Lisa Bayer, Allyson Andrews, Dr. Greg Gray (NHRC); Dr. Bruce Jones, Michelle Chervak, Keith Hauret, Sara Canada, Debra Shepherd, Jeff Sorey (USACHPPM); COLCharles Hoge, Dr. Stephen Messer (WRAIR); Dr. Craig Hyams (Dept. of Veterans Affairs).



http://www.nhrc.navy.mil/rsch/code25/program5.htm